



HICHROM

Chromatography Columns and Supplies

LC COLUMNS Hichrom Chiral Columns

Catalogue 9

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HICHROM CHIRAL COLUMNS

- Chiral 'Pirkle-type'
- Unique covalent bonding
- Enantiomer elution order inversion
- Competitively priced
- Hichrom high efficiency

Hichrom manufactures two ranges of 'Pirkle-type' columns for the analysis of a wide range of enantiomers of pharmaceutical or agrochemical origin. CHIRA-chrom 1 type columns contain a stationary phase in which the hydroxyl groups on the silica surface have been modified by a nitrobenzoyl derivative of an optically active amino acid. In the CHIRA-chrom 2 type columns a chiral dinitrophenyltartramide moiety is bonded to the silica surface through a propyl spacer group.

Pirkle Chiral Phases

Phase	Type	Endcapped	Particle Size (µm)
D-Phenylglycine	CHIRA-chrom-1	No	5
L-Phenylglycine	CHIRA-chrom-1	No	5
DL-Phenylglycine	CHIRA-chrom-1	No	5
L-Leucine	CHIRA-chrom-1	No	5
Dinitrophenyltartramide	CHIRA-chrom-2	No	5

Inversion of enantiomer elution order

By substituting L-phenylglycine for D-phenylglycine, the order of elution of the chiral peaks can be reversed. Such a procedure can be useful in assigning peak identity or ensuring prior elution of the minor enantiomer, thus allowing its more accurate determination. The availability of the DL-phenylglycine further aids peak assignment by removing chiral separations whilst maintaining background peak retention profile.

